

# FedEx Environmental Overview

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# An Excerpt of the FedEx Environmental Policy

- *FedEx recognizes that effective environmental management is one of its most important corporate priorities.*
- *FedEx is committed to the use of cost effective innovations and technologies to minimize atmospheric emissions from its operations and products.*
- *FedEx strives for efficient use of natural resources to minimize waste generation through efforts that include recycling and prevention of pollution.*



# Initiatives



# FedEx Print Online Service



Through FedEx Office, we provide services to efficiently transmit digitized information, so our customers can have documents professionally printed and finished closer to where they're needed, reducing the resources required to physically transport shipments and reducing greenhouse gas emissions.

# Executive Commitment

## Energy Security Leadership Council

### **Securing America's Future Energy (SAFE)**

Bipartisan committee of CEOs and Military experts

- **Committee Co-Chair**

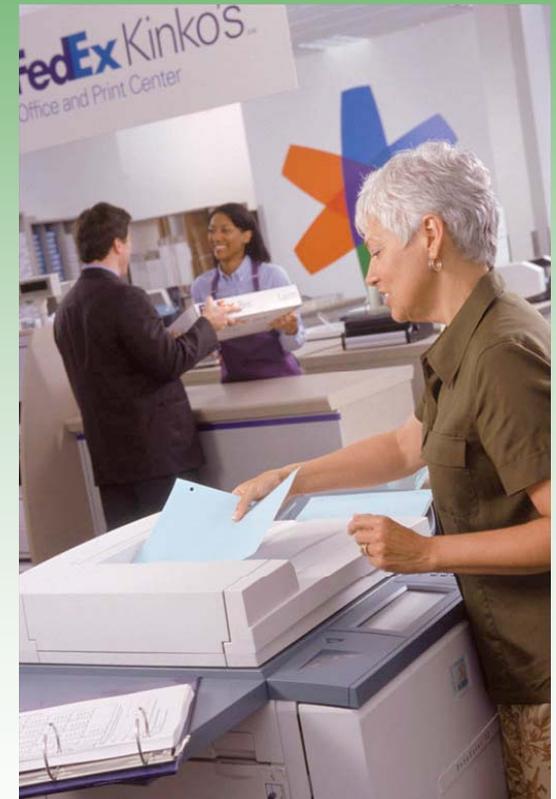
- **Mr. Fred Smith** – Chairman, President & CEO, FedEx Corp

**Proposes far-reaching effort to significantly reduce the oil intensity of US economy by 2030**

# Energy

## FedEx Office

- Purchases of nearly 30% of its total energy consumption from renewable sources such as wind, solar, landfill gas, small hydro or **more than 76M kWh/yr.**
- Over 785 retail locations in 38 states purchase renewable power



# Energy

FedEx Freight installed two solar power systems on facilities in California that will provide a combined 550 KW of power.



Fontana, California



Whittier, California

# Energy

## *FedEx Express Solar Electric Project Oakland, CA West Coast Hub*



904 kW output &  
81,000 square feet of  
roof space covered  
with photovoltaic  
panels

Comprises over 5,700  
photovoltaic panels

Generated over 2  
billion watt-hrs of  
power in first 2 years  
of operation

# Energy

## **Solar-electric Energy Generation**

**904 kW<sup>(1)</sup>**

FedEx Express Oakland, Calif. (2005)

**282 kW**

FedEx Freight Whittier, Calif. (2008)

**269 kW**

FedEx Freight Fontana, Calif. (2008)

**1.5 MW<sup>(2)</sup>**

**Total Solar-electric Systems Power**

And, to come:

**1.4 MW**

FedEx Express Cologne, Germany (2010)

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(1) kW is defined as kilowatt

(2) MW is defined as megawatt

# Information Technology

## ENERGY STAR Low Carbon IT Campaign

FedEx is the first shipping-services company to join this ENERGY STAR campaign, a nationwide effort to assist organizations in reducing energy consumed by computers and monitors. We have committed to activating power management features on 30,000 monitors and computers, saving more than 26M kWh of electricity this year.

# Vehicles



# E700 Hybrid Electric Truck



# Vehicles

FedEx Express and Environmental Defense  
awarded the  
**2005 Blue Sky Award**  
by WestStart-CALSTART  
for its



*"nearly single-handed placement of  
commercial hybrid trucks on the map for  
corporate America."*

# Growing FedEx HEV Fleet

By June 2008... 172 HEVs globally

- 138 FCCC/Eaton E700
- 20 Ford E-450/Azure Dynamics W700
- 10 Iveco Daily W400
- 4 Isuzu Small Box Trucks

By June 2009... 247 HEVs globally  
(per plan for 75 more Hybrids in FY09)

# FedEx Express Hybrid Truck Family

FCCC/Eaton E700



Ford/Azure W700-E450

Isuzu  
Hybrid



Iveco Daily Hybrid



# Executive Commitment

**“FedEx Express is proud to be the first company to make a long-term market commitment to develop and utilize hybrid electric delivery trucks. FedEx Express recognizes effective environmental management as a global corporate priority, and is actively involved in environmental innovations and technologies.”**

David J. Bronczek  
President & CEO  
FedEx Express



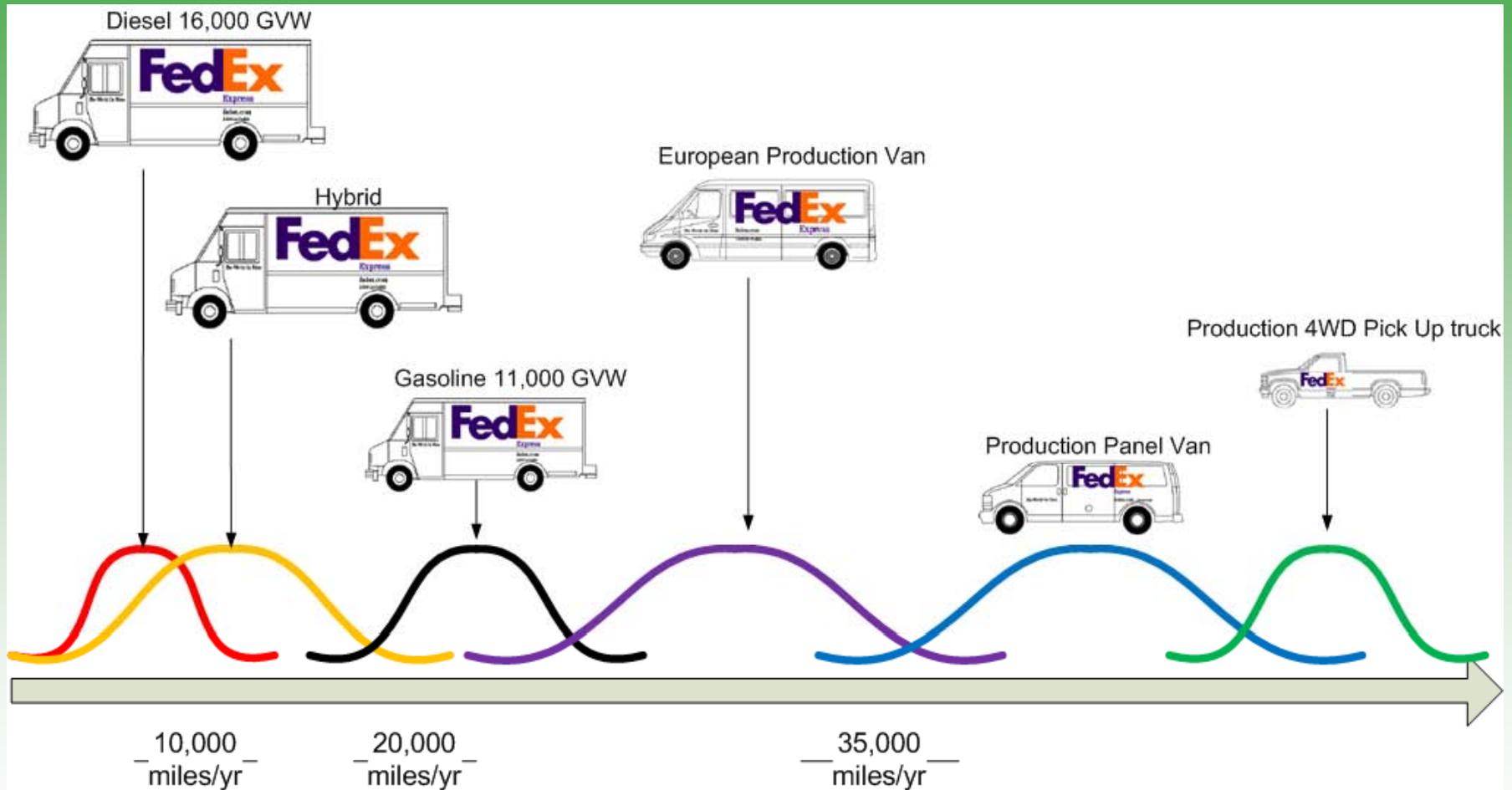
# Vehicles

## Fuel Efficiency & Greenhouse Gas Reduction Activities across FedEx

- Policies and technologies to reduce or prevent idling
- Strategically locating FedEx facilities
- Vehicle/van aerodynamic packages
- Synthetic oils and lubricants
- Automatic tire inflation devices
- Wide-based tires



# Vehicle Utilization Targets



# Executive Commitment

January 2007 –

**US Senate Energy & Natural Resources Committee**

**Bill Logue** - Exec Vice President, FedEx Express

- Recommendations included:

Set fuel economy stds for med & heavy duty vehicles  
(Classes 3-6)

(should stimulate production of alternatives like hybrid  
electrics)

# Biodiesel used Washington, DC

FedEx Sprinter & W700 Trucks  
over 2M miles using B5 Biodiesel



# Vehicles

## Europe

LPG Mercedes Sprinters on-road  
(12% reduction in CO2)

320 liq propane (LPG) and electric  
ground support units at Paris hub

Compressed Natural Gas - Italy

NYC & London – foot couriers



# Vehicles

FedEx Ground is working with the Parker Hannifin Corp. to test hydraulic hybrid delivery vehicles (Class 6 & 7).



# Vehicles

## Tokyo, Japan – Fuel Cells

1 year study in real world, commercial setting using GM's HydroGen3 fuel cell vehicle.

More than 10,000 packages were delivered with this vehicle.



# Aviation



# TRANSPORT INNOVATION

## CAREX

We are a founding member of CAREX, a group that promotes the use of alternative freight transport via high-speed rail in Europe. The group's goal is to develop an express-rail network that offers a fuel-efficient and low-noise alternative to aircraft routes.



# Fuel Sense is common sense.

It's just what we do.





Make the aircraft you've got more fuel-efficient:

## Engine Wash

## Drag reduction programs

- Winglets\*\*

## Weight reduction programs

- Potable Water Tank Removal-Airbus
- Door Hinge Removal-Airbus

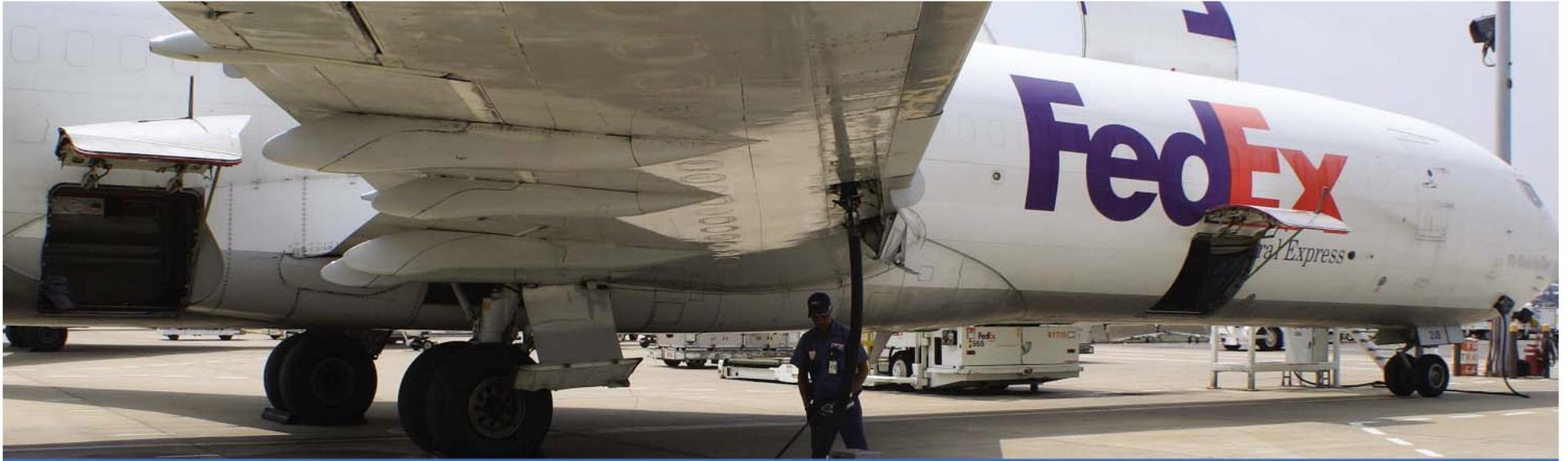
## Continuous Descent



# Aviation

Reduction of in-gate aircraft auxiliary power unit usage has eliminated nearly 2 hours of usage per flight throughout the fleet. This reduces annual fuel consumption by over 9 million gallons.





# Safety trumps economy.

Our first mission is to operate safely.

Always.

Period.



# Aviation

## Planned Aircraft Introductions:

### Boeing 757

- 20 percent greater payload capacity than B727
- 36 percent better fuel efficiency
- 47% less CO<sub>2</sub> per pkg-lb/mi

### Boeing 777

- 18 percent better fuel efficiency, with greater payload capacity



# FedEx Global Citizenship Report

**FedEx**

Global Citizenship Report 2008

**FedEx**<sup>®</sup>  
Express

# GOALS

## Environment and Efficiency

### Aircraft Emissions

We plan to reduce our FedEx Express aircraft CO<sub>2</sub> emissions 20 percent by 2020 on a pounds per ATM basis<sup>(1)</sup>.

Goal **(20%)** by 2020

FY08 **(3.7)%**<sup>(2)</sup>

### Vehicles

We are improving vehicle fuel efficiency and reducing CO<sub>2</sub> emissions from our FedEx Express vehicle fleet.

Goal **20%** by 2020  
fuel economy improvement

FY08 **13.7%**<sup>(2)</sup>

### Utilities Emissions

In 2009, we plan to report on global operations for Scope 2 emissions, measuring the impact of our facilities and utilities. To date, we are able to track utilities emissions on approximately 75 percent of our global facilities.

Goal **100%** tracking

FY08 approximately **75%** tracked

### Renewable Energy

We plan to expand our on-site renewable energy generation in addition to procurement of renewable energy credits (RECs) purchased.

Goal **25,000 MWh**

*FY08 exceeded 25,000 MWh of RECs procured, and generated more than 1,000 MWh of on-site solar energy*

(1) Available ton mile (ATM) is defined as one ton of capacity (cargo) transported one mile.

(2) 2008 improvement is cumulative since our baseline in 2005.

# Chairman Fredrick W. Smith

*People around the world have **welcomed FedEx** into their communities and their daily lives.*

*They **trust us to deliver services** to them in a highly reliable yet cost-effective manner.*

*We know they expect us to do it responsibly and with respect for our team members, our environment and our communities.*

